

Best Practices: CTE Teacher Recruitment & Retention

Division of College, Career and Technical Education

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I. Introduction

High quality career and technical education (CTE) programs are essential to improving the postsecondary and career readiness of all students. While CTE teachers make up less than one-fifth of all teachers, 94 percent of high school students will earn at least one CTE credit prior to graduation (Jacques & Potemski, 2015).

The ability of CTE programs to adequately prepare students for postsecondary success depends largely on the quality of the teachers in the classroom (Levin & Quinn, 2003). However, schools and districts continue to No factor under school control affects student achievement more than the quality of the teacher in the classroom.

struggle to, first, recruit candidates who are most likely to succeed, and second, to develop and retain top-performing teachers. According to Ruhland & Bremer (2002), schools will need to hire more than 2 million teachers in the next decade. The most acute shortages will be felt in urban and rural districts, and in special education, science, mathematics, and career and technical education. Additionally, the costs of teacher attrition are high, estimated at \$15,000 per teacher who leaves the profession, or at least \$2 billion annually (Darling-Hammond & Ducommun, 2011).

To compound this problem, CTE programs are facing additional pressure. According to the Office of Career, Technical, and Adult Education, more than 15 million students were enrolled in CTE courses at

Ninety-four percent of high school students will earn at least one CTE credit prior to graduation. the high school and postsecondary levels during the 2006-2007 program year—an increase of almost 6 million students in just seven years. However, Ruhland and Bremer (2002) found that from 1990 to 2000, the number of CTE teacher education programs fell from 432 to 385 programs, a decrease of 11 percent. So, while student enrollment is rising rapidly, there are fewer CTE teacher education programs, and, due to retirements, the nation could lose as many as 1.5 million veteran teachers by 2018 (Carroll & Foster, 2010; Asunda, 2001).

How can districts recruit and hire teachers who are the best fit for the position, ensure schools are fully staffed, and create incentives for high-performing teachers

to stay in the classroom, particularly in hard-to-fill positions? Why might teachers voluntarily choose to teach a different course, change schools, change districts, or leave the profession altogether?

The purpose of this report is twofold: The first objective is to examine data and research on teacher attrition in order to ascertain where school districts and teachers need the most support. The second objective is to research recruitment and retention strategies and determine if and how these strategies can be utilized in districts across Tennessee.

II. Research and Data Review

In order to determine the appropriate course of action for school districts in Tennessee, what follows is a brief review of the research on teacher retention.

The Teacher Follow-up Survey (TFS) is a nationally-representative sample of public and private K–12 teachers who participated in the previous year's Schools and Staffing Survey. TFS is conducted by the U.S. Census Bureau.

The TFS found that of 3,377,900 public school teachers who were teaching in the 2011-12

Figure 1 National Teacher Attrition, 2011-12 School Year N= 3,377,900 teachers			
Remained at Current School Different School Profession			
84 percent	8 percent	8 percent	

school year, 84 percent remained at the school, 8 percent moved to a different public or private school ("movers"), and 8 percent left the profession during the following year ("leavers") (Figure 1). Therefore, 16 percent of public school teachers left their school in a single school year (Goldring, Taie, & Riddles, 2014).

Of the 8 percent of teachers who moved to a different school, 59 percent moved to another public

Figure 2 Public School Movers N=270,232 teachers				
Public School Within District	Public School Outside District	Private School		
59 percent	38 percent	3 percent		

school within the district, 3 percent moved to a private school, and 38 percent moved to another district (*Figure 2*).

The majority of public school movers (97 percent) left their current public school for a different public school. Additionally, 70 percent of public school movers changed

schools voluntarily.

Of those who left the teaching profession altogether, about 90 percent left voluntarily. There are several important questions to consider: What factors influence a teacher's decisions to stay in the profession but voluntarily leave his or her school or district? Is salary an issue? Does he or she want to move closer to home? Are working conditions less than ideal?

Ingersoll (2001) found that younger (less than 30 years old) and older (more than 50 years old) teachers were more likely to depart than middle-aged teachers. Why might young teachers leave the profession? There is overwhelming evidence that *new* teachers are more likely to leave the profession; teacher attrition is most severe among teachers who have been in the classroom for less than five years (Cochran & Reese, 2007; Ruhland, 2001). It is widely recognized that the first year of teaching is the most challenging. Indeed, Joerger and Bremer (2001) note that very few other professions expect the first-year practitioner to immediately perform at the same level as their more experienced colleagues.

Of those who left the profession, 90 percent did so voluntarily.

Teachers over the age of 50 are nearing retirement age. However, from a survey of teachers in the late 1990s, Ingersoll (2001) found that for those leaving the teaching profession, 27 percent left due to retirement. In a more recent study, Ingersoll (2011) notes that "teacher retirements have always

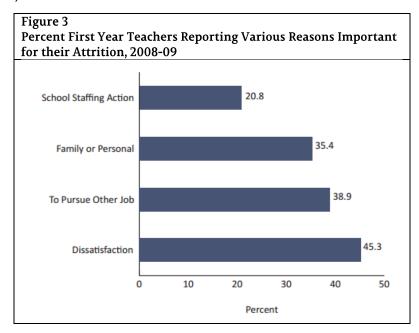
represented only a small portion of all of those leaving teaching—less than a third in recent years. And, if you look at all departures of teachers from schools (both those moving between schools and those leaving teaching altogether), retirement is only about 14 percent of the total outflow." Retirement therefore cannot fully explain why teachers, even those over the age of 50, leave the profession.

Ingersoll (2001) identified key reasons why teachers leave the profession:

- Personal reasons such as pregnancy, health, family move, or family illness (45 percent)
- Dissatisfaction (35 percent)
- Pursuing another job (24 percent)
- School staffing actions (12 percent)

The most-often-cited reasons for dissatisfaction included **poor salary** (45 percent); **lack of student motivation** (38 percent); **inadequate administrative support** (30 percent); **student discipline problems** (30 percent); **inadequate time to prepare** (23 percent); and **lack of faculty influence and autonomy** (18 percent) (Ingersoll, 1999).

Dissatisfaction plays a particularly crucial role in teacher attrition among first-year teacher (*Figure 3*).



While there is evidence that teachers leave the profession for reasons beyond the school's control (salary, retirement, or family illness, for example), there is also evidence that teacher retention may be at least somewhat within the school's control:

Conventional wisdom says that most teacher attrition is beyond the control of schools, especially those in poor communities. The assumption is that teachers leave because of major life events – starting a family, for example – or due to working conditions that school leaders cannot address on their own, such as low pay or inadequate preparation...but, on balance, that conventional wisdom is wrong. Less than 30 percent of irreplaceables [high-performing teachers who are difficult to replace] who plan to leave their school do so for personal reasons beyond their school's control (*The Irreplaceables*, 2012, p. 15).

Therefore, of the teachers who are leaving their school or the profession, many (if not most) are doing so voluntarily for reasons that are within the control of the school's administrators. What can school administrators, particularly CTE directors and principals, do to recruit and retain teachers, particularly the highest-performing teachers?

More than 70 percent of irreplaceables leave their school for reasons within their school's control.

III. Tennessee: State Snapshot

Before considering potential strategies for districts and administrators, it is necessary to review teacher licensing requirements and current recruitment and retention practices in Tennessee.

Licensure Requirements

Tennessee's licensure requirements were updated on Sept. 1, 2015. All teachers who apply for and obtain a license are given a Practitioner License or a Practitioner Occupational License. Prior to Sept. 1, 2015, initial teaching licenses were designated as "apprentice" licenses. Below are two tables containing information on Practitioner and Practitioner Occupational Licenses, including the minimum requirements to obtain the license, the expiration date, renewal information, and finally, how to advance from a Practitioner to a Professional or Professional Occupational License.

	Practitioner License Requirements	Practitioner Occupational License Requirements
Minimum Requirements	 Hold a bachelor's degree from a regionally-accredited college or university Enrollment in or completion of an approved educator preparation program and be recommended for licensure by that provider Meet all requirements regarding assessments and qualifying scores as specified by State Board of Education rules or policy Meet requirements in at least one area of endorsement 	 Hold a high school diploma or higher Enrollment in or completion of an approved educator preparation program and be recommended for licensure by that provider Meet industry certification requirements Meet requirements in at least one area of endorsement
Expiration Date	Valid for three (3) years	
Renewal	May be renewed once	
Advancement to Professional License	 Three years of experience Completion of a teacher preparation program Recommendation of the director of schools or documentation of 30 Professional Development Points (PDPs) 	 Three years of experience Completion of a teacher preparation program Recommendation of the director of schools or documentation of 30 Professional Development Points (PDPs) Attendance during the first year of teaching at the five days Occupational License New Teacher Training Four days release time to observe three experienced teachers within their endorsed teaching area and one experienced teacher outside of their teaching area Assigned teacher mentor during the first three years of teaching Current/valid industry certification where required by teacher endorsement area

Applicants who have experience working in an industry, but may not have completed a traditional educator preparation program, are issued a Practitioner Occupational License.

It is important to note that the requirements to obtain a Practitioner Occupational License are the *minimum* requirements; all of the occupational endorsement areas have varying education, occupational work experience, and industry certification requirements. For example, for an educator who will be teaching a course in the Health Science Career Cluster, the teacher must hold an associate's degree or higher that is related to their health care license and must have completed one year of full-time or part-time successful employment within the past five years in a related health occupation.

Teachers of CTE courses may hold any of the four (4) different license types (Practitioner, Practitioner Occupational, Professional, and Professional Occupational), as CTE teachers are issued different licenses based on the endorsement that they hold (Figure 5).

In sum, educators who obtain a Practitioner Occupational License differ from other educators in that they are less likely to have completed an educator

Figure 5 CTE Endorsement Areas		
Career Cluster	Traditional	Occupational
Agriculture, Food, and Natural Resources	X	
Advanced Manufacturing		X
Architecture and Construction		X
Arts, A/V Technology, and Communications		Х
Business Management	X	
Education and Training	X	
Finance	X	
Government and Public Administration	X	
Health Science		X
Human Services		Х
Hospitality and Tourism		Х
Information Technology		X
Law, Public Safety, and Corrections Security		Х
Marketing	Х	
STEM	Х	
Transportation, Distribution, and Logistics		X

preparation program and are not required to hold a bachelor's degree, but they have deep content knowledge in their area of expertise which has been obtained through professional work experience in a career other than teaching.

Figure 6 Occupational License Advancement Rate				
Cohort	# of Apprentice Occupational license issued # Advanced Rate		% of Cohort Assigned to Classroom in 2015-16	
1999-00	146	44	30.10%	15.10%
2000-01	275	110	40.00%	17.50%
2001-02	207	77	37.20%	17.90%
2002-03	221	79	35.70%	21.70%
2003-04	188	72	38.30%	17.00%
2004-05	224	91	40.60%	25.00%
2005-06	288	110	38.20%	23.60%
2006-07	255	110	43.10%	23.50%
2007-08	283	111	39.20%	26.90%
2008-09	233	82	35.20%	22.70%
2009-10	230	64	27.80%	23.50%
2010-11	278	81	29.10%	26.60%
2011-12	305	89	29.20%	31.10%
Average	241	86	35.67%	22.45%

Due to the differing characteristics of teachers who obtain a Professional or a Professional Occupational License in Tennessee, as well as the differences in licensure advancement requirements, districts offering CTE courses face a unique set of challenges when it comes to staffing their schools with highly qualified CTE teachers and retaining them as teachers in the district for more than two to three years. In fact, according to Figure 6, on average only 35.67% of occupationally-licensed teachers advanced to the professional license. Additionally, on average only 22.45% of teachers from each cohort were assigned to a classroom in the 2015-16 school year.

District Surveys

In order to gain a deeper understanding of teacher recruitment and retention practices in Tennessee, we conducted surveys with 17 CTE directors across the state. These districts represent a range of large and small districts in terms of student population, the size of CTE programs, the number of CTE teachers, and Carl D. Perkins funding allocation for the 2014-15 school year.

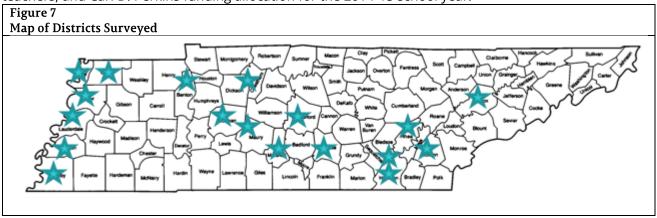


Figure 8 Key Data Points of Di	stricts Surveyed			
	Lowest	Highest	Median	Average

Total Student Population	901 students	116,059 students	5,387 students	22,017 students
# Programs of Study*	4 programs of study	295 programs of study	31 programs of study	64 programs of study
Number of CTE Teachers	8 teachers	447 teachers	35 teachers 90 teachers	
Perkins Allocation	\$20,024	\$2,401,833	\$94,090	\$380,080

Data is from the 2014-15 school year. For full data set, see the Appendix.

According to Figure 8, there is a wide range in student population, academic programs, human capital resources, and financial resources between the districts we surveyed. However, despite the range in resources available to these districts, a handful of common issues were identified by CTE Directors: looming retirements of an aging teacher population, low pay compared to previous salaries as industry employees, the required coursework to advance to a professional license, and generally feeling overwhelmed with all of the duties of being a teacher.

Occupationally licensed teachers are working harder and longer, spending less time with family, and frequently are making less money than they were in their previous occupations.

There is also a wide range in the hiring power of the CTE director. Some CTE directors are actively involved in the hiring process, while others may be completely excluded.

When it comes to recruitment of CTE teachers, districts often rely on word of mouth to spread the news of an open position, and, usually, the one teacher who meets all of the minimum requirements is the one who is offered the position.

Finally, while all new teachers may be overwhelmed with lesson planning and administrative duties, occupationally-licensed teachers in particular have

difficulty; they are industry experts with little to no teacher training, and they often express that they had no idea how much was involved in teaching. They are working harder and longer, spending less time with family, and frequently are making less money than they were in their previous occupations. Additionally, in order to advance their license, they must complete coursework at an educator preparation program.

^{*}Programs of Study include duplicate POS's across schools. Therefore, Programs of Study correlate roughly to the number of individual CTE courses offered at all schools within the district.

IV. Recruitment Best Practices

Teacher retention begins with recruitment. Hiring practices should be implemented in such a way that newly-hired teachers intend to stay and grow within the organization.

Several key issues were identified by the CTE directors who were surveyed, including the varying levels of CTE director involvement in the hiring process, looming retirements of aging CTE teachers, the difficulty in finding teachers with specific endorsements (namely Health Science teachers), a limited applicant pool, and the difficulty in finding a teacher to hire who meets all of the requirements of the position. Below is a list of potential strategies for improving the recruitment of CTE teachers in Tennessee.

Use a compelling message to **market your district** and attract teacher talent. Prospective employees of any kind want to know what sets an organization apart from the others. Develop your "pitch" and marketing materials to showcase highlights of your school and district culture. Having a simple, clean, and user-friendly website also gives applicants easy access to information about your district.

Grow your applicant pool. From our survey of CTE directors, we learned that few applicants meet all of the minimum education and certification requirements for an open position. Therefore, very often the person who is hired is the one candidate who simply meets all the requirements. However, this does not mean that this person fits with the school culture and is prepared for a teaching career. In order to obtain strong applicants—who possess both all of the necessary requirements *and* have the potential to be successful teachers—is to increase the applicant pool by heavily marketing open job positions.

In 2015, 64 percent of U.S. adults owned a smart phone, up from 35 percent in 2011 (Smith, 2015); thus, social media websites such as **Twitter**, **Facebook**, **and LinkedIn** are excellent marketing tools. Post open job positions on your district's webpage, Twitter account, and Facebook page, and encourage employees to share these posts.

Shelby County Schools, for instance, has a well-developed website that has a distinct look, and it is easy for potential applicants to navigate and find information. The "Careers" section of their website outlines the district's mission and vision. It also includes a link to the district's recruitment Twitter handle, @SCSK12Jobs, which regularly posts updates about job openings.

Hiring practices should be implemented in such a way that newly-hired teachers intend to stay and grow within the organization.

Offer financial incentives to attract applicants to your district. For example, Clarksville-Montgomery County Schools offers a tuition reimbursement to new occupationally-licensed teachers for completing an educator preparation program. Other districts offer additional compensation based on years of work experience. Cheatham County Schools, for example, offers compensation to occupationally-licensed CTE teachers based on their years of previous industry experience in their field; 7–10 years of relevant industry experience qualifies as three years of teaching experience on their salary schedule.

Host or participate in recruitment fairs in the late winter/early spring for potential candidates to learn more about you, your school, and any open or soon-to-be open positions. Lipscomb University, among other postsecondary institutions, offers recruitment fairs for its upcoming graduates. Recruitment fairs are also a great time to network; even if you do not have a position currently open for

a specific candidate, save the information of great candidates so that you may contact them in the future.

Additionally, **collaborate with postsecondary institutions** to make them aware of teaching opportunities in CTE, especially in the hard to fill areas such as health science, manufacturing, welding, and information technology. Most postsecondary institutions have a career services office and job board to assist graduates in finding a job; this would be a strategic place to market your district and schools. **Use industry advisory councils** to find employees who may be wanting to change careers. Don Lawson, CTE director of Knox County Schools, recently hired a new automotive teacher through an advisory council. This teacher was previously working at Toyota; the industry partner was eager to help this employee obtain a teaching position, as Toyota would be willing to hire students from this new teacher due to industry experience and connections.

Be transparent about job requirements, license requirements, and the workload. Many new occupationally-licensed CTE teachers are unaware of the level of work involved in being a teacher. By adequately preparing teachers for the job, there will be fewer surprises and unexpected responsibilities. Strategies such as requiring applicants to shadow and/or engage in a Q&A session with a current teacher, participating in classroom tours, or having the applicant role-play delivering a lesson during the interview not only more adequately prepare applicants for jobs, but they also introduce applicants to the culture of your school and district (Greengard, 1995).

Streamline the process. Hiring practices may also impact a district's ability to quickly hire the best applicants. Levin and Quinn (2003) examined three large urban districts and found that applicants apply in large numbers (hundreds, even thousands of applicants), but applicants withdraw after months in limbo and accept offers from districts who make offers earlier (typically suburban/rural districts). The best candidates, who have the most options, were most likely to abandon hard-to-staff districts in the face of hiring delays even though they would have preferred to be hired in the urban district. Levin and Quinn argue, "The prevalent explanations for late hiring are poor design and execution by district human resources offices: a cumbersome application process, too many layers of bureaucracy, inadequate customer service, poor data systems, and an overall lack of urgency" (p.6).

To make a hiring process more efficient and ensure that the highest-quality candidates do not take a job elsewhere, first map out the current hiring process in detail so that areas of improvement or inefficiencies can be identified. Then, develop clear goals and accountability, a clearly-defined applicant process, sufficient systems to track applicants and vacancies, and encourage strong customer service and communication. Planning to hire teachers in April or May (if not earlier) ensures that you are able to hire the best candidates.

To help plan ahead, **require teachers to provide early notification that they are resigning or retiring, and enforce this deadline**. Late notification of departing teachers can often shift the emphasis from hiring a quality teacher to the need to quickly get a body in the classroom. Because it can take weeks if not months to complete the hiring process, ensure a position will be staffed before August by requiring retiring or resigning teachers to provide notice in early spring (e.g. March).

There is a disconnect between employers' perceptions of the causes of attrition and the actual reasons why employees leave. **Use formal exit surveys.** Exit surveys may be implemented by the CTE director, the principal, or the human resources office. It does not necessarily matter who administers the survey; it is, however, essential not only to collect information about why employees are leaving in order to identify trends in teacher attrition but also to share this information with all key stakeholders. Information gleaned from exit surveys will help to clarify what changes may need to be made in order to both attract high quality candidates, as well as retain the best teachers. As discussed earlier, many employers assume that employees leave due to pay, but 88 percent of employees leave an organization for reasons *other than pay* (Yazinski, 2009). There is a disconnect between employers' perceptions of the causes of attrition and the actual reasons why employees leave.

Using formal exit surveys will also reveal important data point: the time of year that teachers are leaving. It may become evident, for example, that teachers tend to quit at the beginning of the school year. New teachers may be feeling overwhelmed and under-supported. In this case, providing a mentor or new teacher orientation could help to alleviate worries and stress. If veteran teachers are frustrated by a new, unfamiliar teaching assignment or a class that is particularly difficult to manage, more planning time and specific classroom management strategies could be provided. Knowing the specific reasons that teachers leave allows district leaders to adjust the management and support of teachers.

V. Retention Best Practices

What can school administrators do to retain their teachers, particularly the highest-performing teachers? While a certain level of turnover is desirable (a teacher who is not committed or does not fit in with the school's culture may actually be detrimental to student success), it is incredibly costly to lose a high-performing teacher for reasons that were in the school's or district's control.

From the Teacher Follow-Up Survey (Goldring, et al., 2014), we learned that only about 8 percent of those who left teaching were working in a field outside of education. So, most teachers who leave the profession choose to stay within education and are not interested in changing to a new profession. Additionally, **only half of those who left teaching reported that their work load was better in their new position** or that general work conditions were better in their new position. If one in two teachers who leave the teaching profession do not achieve better working conditions or a lighter workload, what are they looking for?

A higher salary of the sala

Low pay for occupationally-licensed teachers compared to their previous jobs was a frequently-cited issue in the districts we surveyed. However, as was mentioned earlier, most teachers leave the classroom for reasons not outside of their school's control.

A higher salary does not lead to higher job satisfaction and engagement.

In fact, according to Chamorro-Premuzic (2013), the association between salary and job satisfaction is very weak. In fact, "employees earning salaries in the top half of our data range reported similar levels of job satisfaction to those employees earning salaries in the bottom-half of our data range" (p.162). This is consistent with Gallup's engagement research (Blacksmith & Harter, 2001), which reports no significant difference in employee engagement by pay level. While a higher salary may encourage an applicant to accept a job offer, the research does not show that a higher salary leads to higher job satisfaction and engagement.

According to Yazinski (2009) there are seven main reasons why employees leave a company:

- 1. Employees feel the job or workplace is not what they expected.
- 2. There is a mismatch between the job and person.
- 3. There is too little coaching and feedback.
- 4. There are too few growth and advancement opportunities.
- 5. Employees feel devalued and unrecognized.
- 6. Employees feel stress from overwork and have a work/life imbalance.
- 7. There is a loss of trust and confidence in senior leaders.

From this list above, there are several key practices that administrators can implement to support teacher retention. What teachers want—what any employee wants—is to feel valued. Support and mentoring, coaching and feedback, opportunities for growth, adequate working conditions, and salary all contribute to employee satisfaction and retention. Retention is, essentially, consistently re-recruiting your teachers. Below is a list of potential strategies for improving the retention of CTE teachers.

Recognize effective teachers. A simple and personal "thank you" can go a long way. Teachers (indeed, all employees) will go the extra mile if they have a sense of worth in their jobs, believe their jobs make good use of their skills, and receive recognition for their successes (Yazinski, 2009). Hand-written thank you notes, substitute or personal days, offering leadership roles (with adequate training and time to

devote to the new responsibilities), or simply telling a teacher that he or she is high-performing are all ways show gratitude and give recognition.

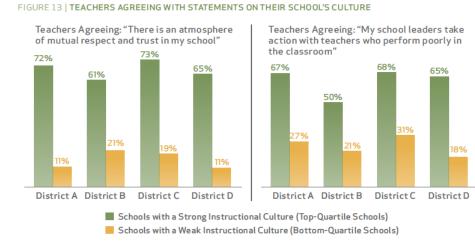
Financial incentives are one way to show employees that their time and work are valued. Offering bonuses to teachers for performance based on clear criteria, or for taking on leadership or mentor roles, demonstrates to teachers that hard work and achievements will be rewarded. A well-developed and efficient differentiated pay system will allow you to offer such financial rewards.

Retention is, essentially, consistently rerecruiting your teachers.

It is not only important to reward high-performing teachers; in order to build a strong culture, it is important to **dismiss or counsel out experienced low-performing teachers** and those who demonstrate a poor work ethic or attitude to show that those who consistently do not improve or do not fit within the organization will not be rewarded.

According to TNTP (*The Irreplaceables*, 2012), at schools where high percentages of "irreplaceables" (high-performing, hard-to-replace teachers) remained in the classroom, principals "were more like to clearly communicate high expectations to teachers and ensure that teachers feel supported, and less likely to tolerate ineffective teaching" (p.18). Poor school leadership and a negative culture are among the top reasons high-performing teachers say they plan to leave their schools. A strong culture, though, can help to keep strong teachers in a school. According to TNTP (*Greenhouse Schools*, 2012), at schools with a strong instructional

culture, nearly half of teachers leave for reasons that have nothing to do with the school. However, at schools with a weak instructional culture, teachers who leave are much more likely to cite poor leadership and insufficient development opportunities.



A positive culture starts

with strong leadership. Other teachers within a school can be a source of negativity and resentment that can spread throughout the entire community, affecting students and even parents. It is important for all school staff to monitor school culture and maintain the expected levels of professionalism, honesty, and courteous behavior.

Provide opportunities for professional growth and provide coaching and feedback towards the vision of excellent CTE instruction. It is essential to provide teachers with training that will expand their knowledge and improve their practice. Not only does this ensure that teachers are fully aware of their job responsibilities, training employees reinforces their sense of value (Yazinski, 2009; Ruhland, 2001).

Professional development can come in the form of formal in-service training, professional learning communities, informal collaboration between teachers, self-directed learning, and even **externship programs**. Metropolitan Nashville Public Schools, Hamblen County Schools, and Gibson County Special School District have all implemented externship programs where teachers spend between a few days and several weeks in a company in order to better understand the knowledge and skills that students will need to have in order to be successful in the future workforce. **In fact, in Metropolitan Nashville Public Schools, the externship program has been key in retaining teachers in the same academy. The retention rate has increased from 25 percent in 2010 to 82 percent in 2014**.

The Tennessee Department of Education's division of college, career and technical education has also developed a **Vision of Excellent CTE Instruction** to ensure all stakeholders have a vision of what excellent instruction should look like in a CTE classroom. This vision (and training and support for CTE directors) will assist CTE directors in knowing how to coach and mentor their teachers.

The work of teachers is done largely in isolation from colleagues. This sense of isolation can be especially difficult for new teachers.

Support new teachers. Traditionally, new teachers do not receive the kind of support, guidance, and orientation programs that new employees in other industries receive. The work of teachers is done largely in isolation from colleagues. This sense of isolation can be especially difficult for new teachers, who, upon accepting a position in a school, are often left on their own to "sink or swim" within their own classrooms.

As a solution, induction or orientation programs have been shown to have a positive impact on instructional practices and teacher retention (Ingersoll & Strong, 2011). Induction programs can involve a district- or school-based new teacher orientation, assigning mentors, and providing relevant professional development on topics such as classroom management, student assessment, eTIGER, teacher evaluation, etc.

Clarksville-Montgomery County Schools, for example, provides an in-depth, three-day new teacher orientation called the PRIDE Academy. During this time, new teachers learn about district and state initiatives and meet with key district staff including the instruction coordinator, CTE director, and technology integration coordinator. On the final day, the new teachers spend time with their principal and are assigned a mentor from their school for the next two years. Mentors are trained by the new teacher instruction coordinator each June. The CTE director, Karen Pitts, also provides new CTE teachers with a CTE Standard Operating Procedure Manual on a jump drive, which covers Quality Program Indicators, CTSOs, eTIGER, Programs of Study, and administrative tasks such as purchasing and travel.

Monitor the status of teachers' licenses. The CTE director, principal, or human resource department should regularly check the status of teachers' licenses, updating teachers on policy changes and alerting them when they need to renew or advance their license.

Offer your own educator preparation program in-house. To reduce the expense burden on your new teachers, become your own accredited institution to provide coursework to your teachers. For example, Metropolitan Nashville Public Schools (MNPS) created a free new teacher training program for their teachers. These teachers meet once per month from 3–6 p.m., one full day each semester, and two weeks during the summer. As a result of an agreement between Tennessee State University (TSU) and MNPS, TSU gives teachers who complete this program 12 hours of credit. (However, if a teacher were to leave the district before advancing his or her license, the 12 hours of credit would not transfer.)

Foster trust and confidence. Develop strong relationships with teachers to build trust. All employees have to believe that those in management positions are competent and that the organization will be successful. Any employer has to be able to inspire this confidence and make decisions that reinforce it. Another way to build trust is to **ask teachers for their input.** It's important for employees to know that the employer is really listening and responds to (or at minimum acknowledges) employee input. Listen to teachers and ask for their input, such as through meetings and surveys. When teachers feel as though they are important and have something to contribute, they are more likely to feel valued.

VI. Conclusion

To summarize, no factor under school control impacts student achievement more than the quality of the teacher in the classroom. It is imperative that schools and districts implement strategies to recruit the most effective teachers.

In Tennessee, occupationally-licensed teachers face high attrition rates. As alternatively-licensed teachers, those with occupational licenses come into the teaching profession looking for more flexible hours and an opportunity to work with students, often at the expense of a higher salary. However, many become overwhelmed with teaching within the first few months.

This report shows that teacher attrition is largely caused by factors that are under a school's control, including inadequate administrative support, student discipline problems, inadequate time to prepare, poor salary, and lack of faculty influence and autonomy.

Teacher retention, though, is essentially re-recruitment. Factors that influence a person's decision to join a company, such as opportunities for growth, leadership, vision, adequate working conditions, a worklife balance, and salary all contribute to employee satisfaction. Most notably, teachers, like all employees, want to feel valued.

The strategies identified in this report focus on evidence-based practices that school and district administrators can implement to ensure that the best candidates are entering and staying in the classroom.

Resources

- Asunda, P. (2011). Career and technical education teacher preparation trends: A pilot study. *Online Journal for Workforce Education and Development, 5*(3). Retrieved 2015, from http://opensiuc.lib.siu.edu/cgi/viewcontent.cgi?article=1107&context=ojwed
- Blacksmith, N., & Harter, J. (2001). *Majority of American workers not engaged at their jobs*. Gallup. Retrieved 2015, from http://www.gallup.com/poll/150383/majority-american-workers-not-engaged-jobs.aspx.
- Carroll, T., & Foster, E. (2010). *Who will teach? Experience matters*. National Commission on Teaching and America's Future. Retrieved 2015, from http://nctaf.org/wp-content/uploads/2012/01/NCTAF-Who-Will-Teach-Experience-Matters-2010-Report.pdf
- Cochran, L., & Reese, S. (2007). A successful induction into the teacher profession. *Techniques*, 25-27. Retrieved 2015, from file:///c:/Users/ca18728/Downloads/Sept07 Thm3%20(1).pdf
- Chamorro-Premuzic, T. (2013). *Does money really affect motivation? A review of the research.* Harvard Business Review. Retrieved 2015, from http://hbr.org/2013/04/does-money-really-affect-motiv
- Darling-Hammon, L., & Ducommun, C. (2011). *Recruiting and retaining teachers: What matters most and what can government do?* The Forum for Education and Democracy. Retrieved 2015, from http://www.forumforeducation.org/news/recruiting-and-retaining-teachers-what-matters-most-and-what-can-government-do
- Goldring, R., Taie, S., and Riddles, M. (2014). *Teacher Attrition and Mobility: Results From the 2012–13 Teacher Follow-up Survey* (NCES 2014-077). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved 2015 from http://nces.ed.gov/pubsearch.
- Greengard, S. (1995). Leveraging a low-wage work force. *Personnel Journal, 74*(1), 90-102. Retrieved 2015, from http://www.workforce.com/articles/leveraging-a-low-wage-work-force
- *Greenhouse schools: How schools can build cultures where teachers and students thrive.* (2012). New York, NY: The New Teacher Project.
- Ingersoll, R. (2001). *Teacher turnover, teacher shortages, and the organization of schools*. Center for the Student of Teaching and Policy. Retrieved 2015, from https://depts.washington.edu/ctpmail/PDFs/Turnover-lng-01-2001.pdf
- Ingersoll, r. & Strong, M. (2011). The impact of induction and mentoring program for beginning teachers: A critical review of the research. *Review of Education Research*, *81*(2), 201-233.
- Jacques, C., & Potemski, A. (2015). 21st century educators: developing and supporting great career and technical education teachers. Washington, D.C.: Center on Great Teachers and Leaders at American Institutes for Research.

- Joerger, R., & Bremer, C. (2001). *Teacher induction programs: A strategy for improving the professional experience of beginning career and technical education teachers*. Columbus, Ohio: National Dissemination Center for Career and Technical Education. Retrieved 2015, from http://www.nrccte.org/sites/default/files/publication-files/tchr indctn prog.pdf
- Levin, J., & Quinn, M. (2003). *Missed opportunities: Howe we keep high-quality teachers out of urban classrooms.*New York, NY: The New Teacher Project.
- Recruitment and hiring (2010). New York, NY: The New Teacher Project. Retrieved 2015, from http://www.doe.in.gov/sites/default/files/turnaround-principles/recruitmentandhiring03.12final3.pdf
- Ruhland, S.K. (2001). Factors influencing the turnover and retention of Minnesota's secondary career and technical education teachers. *Resources in Education*. Retrieved 2015, from http://files.eric.ed.gov/fulltext/ED463414.pdf
- Ruhland, S. K., & Bremer, C. D. (2002). Alternative teacher certification procedures and professional development opportunities for career and technical education teachers. St. Paul, MN: National Research Center for Career and Technical Education, University of Minnesota. Retrieved 2015, from https://www.giz.de/expertise/downloads/Fachexpertise/en-teachertraining-alternative-teacher-certification-procedure.pdf
- Smith, A. (2015). *U.S. smartphone use in 2015*. Washington, D.C.: Pew Research Center. Retrieved 2015, from http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/
- The irreplaceables: Understanding the real retention crisis in America's urban schools. (2012). New York, NY: The New Teacher Project.
- Yazinski, S. (2009). Strategies for retaining employees and minimizing turnover. Brentwood, TN: Business and Legal Resources. Retrieved 2015, from <a href="https://hr.blr.com/whitepapers/Staffing-Training/Employees-Turnover/Strategies-for-Retaining-Employees-and-Minimizi

Appendix: Recruitment and Retention Survey of CTE Directors

	Student	# Programs	# CTE	Perkins
District	Population	of Study*	Teachers	Allocation
Bradley County Schools	10,367	39	58	\$131,508.00
Coffee County Schools	4,575	20	29	\$88,768.28
Metro Nashville Public Schools	84,070	97	219	\$1,490,282.00
Dyer County Schools	3,994	13	13	\$45,887.00
Hickman County Schools	3,611	21	33	\$63,153.00
Houston County Schools	1,394	4	8	\$23,882.00
Knox County Schools	59,750	245	251	\$860,454.00
Lake County Schools	901	5	12	\$20,024.00
Lauderdale County Schools	4,541	25	25	\$94,090.00
Marshall County Schools	5,387	48	34	\$74,853.00
Maury County Schools	12,263	46	58	\$200,357.00
McMinn County Schools	5,863	31	38	\$129,758.00
Obion County Schools	3,622	21	29	\$46,109.00
Rhea County Schools	4,443	14	35	\$87,751.00
Rutherford County Schools	41,901	122	205	\$550,701.00
Shelby County Schools	116,059	295	447	\$2,401,833.00
Tipton County Schools	11,547	38	38	\$151,957.00

Information is from the 2014-15 school year.

^{*}Programs of study include duplicate programs of study across schools. For example, in Metro Nashville Public Schools, nine high schools offer programs of study in the health science career cluster. Therefore, programs of study correlate roughly to the number of individual CTE courses offered at all schools within the district.